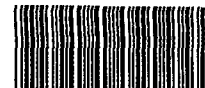


**Cordant  
Technologies****News release**

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Note: For additional  
information on Cordant  
Technologies, see  
<http://www.cordanttech.com/>

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**Thiokol Propulsion Receives \$1.7 Billion NASA  
Contract****Brigham City, UT, August 23, 1999**

Thiokol Propulsion, a division of Cordant Technologies Inc., has signed a follow-on contract from the National Aeronautics and Space Administration (NASA) to continue producing reusable solid rocket motors (RSRM) for the Space Shuttle Program. The contract, valued in excess of \$1.7 billion, extends Thiokol Propulsion's RSRM activities until May 2005.

This is the sixth in a series of contracts awarded to Thiokol Propulsion for the design, development, production and refurbishment of solid rocket motors for the Space Shuttle Program. Under its provisions, administered by NASA's Marshall Space Flight Center, Huntsville, Alabama, Thiokol Propulsion will deliver 70 flight motors, enough for 35 Space Shuttle flights, and three test motors. This will be accomplished using both new and refurbished hardware. Delivery of the first flight motor is scheduled for September 1999. The three test motors will be static fired at Thiokol's northern Utah facility to evaluate new materials and processes. The static tests are currently planned for May 2001, November 2002 and May 2004.

Thiokol received full authority to proceed on the contract in October 1998. Purchase on long-lead items began in January 1998.

The RSRM is the largest solid rocket motor ever flown, the first designed for reuse and the only one rated for human flight. Each Space Shuttle launch requires the boost of two RSRMs, which provide 85 percent of the thrust at liftoff. Following the launch, the RSRMs are recovered at sea and returned to Utah for refurbishment and reloading for future flights. In keeping with the overriding objective of safely flying the Space Shuttle system, Thiokol has delivered 146 flight RSRMs to NASA since return-to-flight in 1988.

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From ignition to end of burn, each RSRM generates an average thrust of 2,600,000 pounds and burns for approximately 120 seconds. Each motor is just over 126 feet long and 12 feet in diameter. The entire booster - including nose cap, frustum, and forward and aft skirts - is approximately 149 feet long. Of the motor's total weight of 1,252,000 pounds, propellant accounts for 1,107,000 pounds. By the time the twin RSRMs have completed their task and are jettisoned to fall back to earth, the Space Shuttle orbiter has reached an altitude of 24 nautical miles and is traveling at a speed in excess of 3,000 miles per hour.

With 17,000 employees worldwide, Cordant Technologies (CDD-NYSE) is a strategically balanced global business with consolidated annual sales of approximately \$2.5 billion. Cordant Technologies' Thiokol Propulsion business is the leading producer of solid propulsion systems; its Huck International subsidiary delivers high-performance industrial and aerospace fastener systems, and Cordant's Howmet International Inc. subsidiary is a global manufacturer of aircraft and industrial gas turbine engine components.

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